paragraph 22 of the Office Action under 35 U.S.C. § 103 as obvious, citing Yemini in view of Nakajima (U.S. Patent No. 6,411,945); and claim 13 in paragraph 23 of the Office Action under 35 U.S.C. § 103 as obvious, citing Yemini.

The abstract of Yemini discloses "[a]n apparatus and method is provided for efficiently determining the source of problems in a complete system based on observable events. ... Various embodiments of the invention contemplate creating a causality matrix which relates observable symptoms to likely problems in the system, reducing the causality matrix into a minimal codebook by eliminating redundant or unnecessary information, monitoring the observable symptoms, and decoding problems by comparing the observable symptoms against the minimal codebook using various best-fit approaches". In the Background section, Yemini discloses that "[a]s computer networks and other systems have become more complex, their reliability has become dependent upon the successful detection and management of problems in the system" (emphasis added). (Yemini, Col. 1, Lines 25-30) In the Summary section, Yemini discloses "[t]he present invention...provide[s] a method and apparatus for efficiently determining problem events from observable symptoms. ... [T]he term 'problem' as used in this specification will be understood to mean any exception event[]". (Yemini, Col. 7, Line 65 – Col. 8, Line 45) Clearly, the invention in Yemini is to determine how well an actual device or system is operating and to troubleshoot the system based on observable exception events.

With respect to claims 1-15 of the Application, the fact that both the present invention and Yemini have causal networks is an inadequate ground for rejection of the claimed invention.

Claim 1 of the Application includes *creating* a virtual representation of a weapon system from analysis models whose parameters are selectively filled. In other words, the causal network

comprised of the analysis models is a tool for creating a model of a weapon system that, except to the extent of the selected arguments, does not exist until the analysis models are run. Claim 1 also includes a virtual simulation system to *simulate* a weapon system, i.e., test the model's *anticipated* performance. The apparatus in Yemini does not test the ideal performance of a model created by the apparatus itself; as indicated above, it is an observational apparatus of an actual device or system. Simply put, the present invention is a prospective system used at the conceptualization and design stage to evaulate virtual and dynamic models, wherein Yemini is a retroactive system used to detect faults in existing fixed and static real world things. It is respectfully submitted that Yemini neither teaches nor suggests the invention as claimed in claims 1-15.

With respect to claims 16-20, the Examiner merely states "see claims 15-16, 19, and 28." Claim 15 of Yemini claims an "[a]pparauts for use in analyzing events in a system, the apparatus comprising: means for converting [listed elements] into a causality mapping comprising a mapping between events in the system and likely causes thereof..." (emphasis added). These same limitations are found in claim 19 of Yemini. As described above, the invention in Yemini is to determine how well an actual device or system is operating and to troubleshoot the system based on observable exception events. These are real world "events representing symptoms [of system problems]". (Yemini, Col. 11, Lines 5-15). See also the Background of Yemini, which discloses that "[p]roblems generate observable events, and these events can be monitored, detected, reported, analyzed and acted upon by humans or by programs" (emphasis added). (Yemini, Col. 1, Lines 30-35). For the reasons stated above for claims 1-15 and claims 16-20 of the present invention are distinguishable over Yemini.

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In view of the remarks herein, Applicant believes that the claims, as amended, are patentable over the art of record and clearly supported by the specification, particularly when considered with the drawings.

In view of the remarks herein, Applicant believes that the Application is now in a condition for allowance, and reconsideration and favorable action are respectfully requested. If the Examiner feels that contacting Applicant's attorney via telephone will advance the prosecution of this case, the Examiner is invited to call the number given below.

Respectfully submitted,

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